UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,591	09/19/2003	Michael Wu	CISCP349/3149 64	3645

22434 7590 04/01/2009

Weaver Austin Villeneuve & Sampson LLP
P.O. BOX 70250
OAKLAND, CA 94612-0250

EXAMINER	
HO, CHUONG T	

ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
04/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/664,591	WU ET AL.	
	Examiner	Art Unit	
	CHUONG T. HO	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/16/09 has been entered.

1. The amendment filed 03/16/09 have been entered and made of record.

2. Claim 1-24 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8, 11-18, 21-22, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase et al. (7,092,389) in view of Kuhl et al. (Patent No.: US 7,257,121 B2).

As to claim 1, Chase '389 disclose receiving frames at a gateway device (figure 5, ATM switch 30), comprising: receiving a frame at a metro Ethernet gateway (figure 1 (PER 18), figure 5 (ATM switch 30)) coupled to a metro Ethernet network (figure 1, metro network 10) and an external network (figure 5, ATM network, ATM 32-4, 32-5, FR (frame relay) FR 32-1, FR 32-2, FR 32-3);

The frame (figure 2) having an outer tag value (figure 2, VLAN tag 23) identifying a customer site in a metro Ethernet network, an inner tag values (figure 2, VLAN PRIORITY AND VLAN TAGID) , an Ethernet packet header (figure 2, preamble, destination address, source address), and an Ethernet packet payload (figure 2, data field 21), wherein a first plurality of inner tag (figure 2, User Priority 3 bits) values identify services and a second plurality of inner tag (figure 2, VLAN ID) values identify subnetworks;

Determining that the inner tag value identifies a service (ATM, Frame Relay, or IMA) provisioned for customer site (figure 5, col. 5, lines 30-38, the ATM switch 30 maps tags each frame (with the corresponding customer descriptor) to Frame Relay network, ATM network).

Chase '389 disclose all the subject matter of the claimed invention with the exception of replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network.

Kuhl '121 , from the same or similar fields of endeavor, disclose replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of

internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network. (figure 2, col. 5, lines 15-20, in direction 246, for traffic bound for ATM network 102, the MPLS card 204 of ATM / MPLS edge Switch 122 receives MPLS frames transmitted from MPLS network 104 and converts them into internal cell 350) (figure 3, payload 314 of MPLS frame 312 maps to payload 354 of internal cell 350; header 316 of MPLS frame 312 maps to header 356 of internal cell 350; outer label 318 and inner label 320 of MPLS frame 312 maps to internal header 352 of internal cell 350).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network taught by Kuhl '121 into the outer tag and inner tag of figure 2 of Chase '389.

The replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network can be implemented into the figure 2 of Chase '389. The motivation for replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network as taught by Kuhl '121 into the frame (figure 2) of Chase '389 being enable to mapping quality of service levels between MPLS and ATM connection in a network element (Kuhl '121, col. 1, lines 25-30).

Regarding to claim 11, Chase et al. discloses a gateway device (figure 5, ATM switch 30) coupled to an external network (figure 5, ATM, frame relay, IMA); a metro Ethernet network interface coupled to a metro Ethernet network (figure 1, metro network, figure 5, shared Ethernet trunk in metro network), the frame having an outer tag value (figure 2, VLAN flag 23), an inner tag value (figure 2, VLAN priority and VLAN tagid) an Ethernet header (figure 2, preamble, destination address, source address), and an Ethernet packet payload (figure 2, data field 21);

Wherein the outer tag value (figure 2, VLAN tag 23) identifies a customer site in a metro Ethernet network, wherein a first plurality of inner tag (figure 2, User Priority 3 bits) values identify services and a second plurality of inner tag (figure 2, VLAN ID) values identify subnetworks;

A processor operable to determine that the inner tag value identifies a service provisioned for the customer site (figure 5, col. 5, lines 30-38, the ATM switch 30 maps tags each frame (with the corresponding customer descriptor) to Frame Relay network, ATM network).

Chase '389 disclose all the subject matter of the claimed invention with the exception of replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network.

Kuhl '121 , from the same or similar fields of endeavor, disclose replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of

internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network. (figure 2, col. 5, lines 15-20, in direction 246, for traffic bound for ATM network 102, the MPLS card 204 of ATM / MPLS edge Switch 122 receives MPLS frames transmitted from MPLS network 104 and converts them into internal cell 350) (figure 3, payload 314 of MPLS frame 312 maps to payload 354 of internal cell 350; header 316 of MPLS frame 312 maps to header 356 of internal cell 350; outer label 318 and inner label 320 of MPLS frame 312 maps to internal header 352 of internal cell 350).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network taught by Kuhl '121 into the outer tag and inner tag of figure 2 of Chase '389.

The replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network can be implemented into the figure 2 of Chase '389. The motivation for replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network as taught by Kuhl '121 into the frame (figure 2) of Chase '389 being enable to mapping quality of service levels between MPLS and ATM connection in a network element (Kuhl '121, col. 1, lines 25-30).

Regarding to claim 21, Chase et al. discloses a network node (figure 1, PER 18, figure 5, ATM switch 30), comprising: means for receiving a frame at the network node coupled to a metro Ethernet network (figure 1, metro network, figure 5, shared Ethernet trunk in metro network) and an external network (figure 5, ATM, Frame relay, IMA), the frame having an outer tag value (figure 2, VLAN Flag 23) identifying a customer site in a metro Ethernet network, an inner tag values (figure 2, VLAN Priority and VLAN TAGID), an Ethernet packet header (figure 2, preamble, destination address, source address), and an Ethernet packet payload (figure 2, data field 21), wherein a first plurality of inner tag (figure 2, User Priority 3 bits) values identify services and a second plurality of inner tag (figure 2, VLAN ID) values identify subnetworks;
Means for determining that the inner tag value (ATM, Frame Relay, or IMA) provisioned for customer site (figure 5, col. 5, lines 30-38, the ATM switch 30 maps tags each frame (with the corresponding customer descriptor) to Frame Relay network, ATM network).

Chase '389 disclose all the subject matter of the claimed invention with the exception of replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network.

Kuhl '121 , from the same or similar fields of endeavor, disclose replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network. (figure 2, col. 5, lines 15-20, in direction 246, for traffic bound for ATM network 102, the MPLS card 204 of ATM / MPLS edge Switch 122

receives MPLS frames transmitted from MPLS network 104 and converts them into internal cell 350) (figure 3, payload 314 of MPLS frame 312 maps to payload 354 of internal cell 350; header 316 of MPLS frame 312 maps to header 356 of internal cell 350; outer label 318 and inner label 320 of MPLS frame 312 maps to internal header 352 of internal cell 350).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network taught by Kuhl '121 into the outer tag and inner tag of figure 2 of Chase '389.

The replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network can be implemented into the figure 2 of Chase '389. The motivation for replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network as taught by Kuhl '121 into the frame (figure 2) of Chase '389 being enable to mapping quality of service levels between MPLS and ATM connection in a network element (Kuhl '121, col. 1, lines 25-30).

Regarding to claim 23, Chase et al. discloses receiving a frame at a metro Ethernet gateway (figure 1, PER 18, figure 5, ATM switch 30) coupled to a metro Ethernet network (figure 1, metro network 10) and an external network (figure 5, ATM network, ATM 32-4, 32-5, FR (frame relay) FR 32-1, FR 32-2, FR 32-3);

The frame having an outer tag value (figure 2, VLAN tag 23) identifying a customer site in a metro Ethernet network, an inner tag values (tags, col. 5, lines 30-38), an Ethernet packet header (figure 2, preamble, destination address, source address), and an Ethernet packet payload (figure 2, data field 21), wherein a first plurality of inner tag (figure 2, User Priority 3 bits) values identify services and a second plurality of inner tag (figure 2, VLAN ID) values identify subnetworks;

Means for determining that the inner tag value (ATM, Frame Relay, or IMA) provisioned for customer site (figure 5, col. 5, lines 30-38, the ATM switch 30 maps tags each frame (with the corresponding customer descriptor) to Frame Relay network, ATM network).

Chase '389 disclose all the subject matter of the claimed invention with the exception of replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network.

Kuhl '121 , from the same or similar fields of endeavor, disclose replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network. (figure 2, col. 5, lines 15-20, in direction 246, for traffic bound for ATM network 102, the MPLS card 204 of ATM / MPLS edge Switch 122

receives MPLS frames transmitted from MPLS network 104 and converts them into internal cell 350) (figure 3, payload 314 of MPLS frame 312 maps to payload 354 of internal cell 350; header 316 of MPLS frame 312 maps to header 356 of internal cell 350; outer label 318 and inner label 320 of MPLS frame 312 maps to internal header 352 of internal cell 350).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network taught by Kuhl '121 into the outer tag and inner tag of figure 2 of Chase '389.

The replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network can be implemented into the figure 2 of Chase '389. The motivation for replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network as taught by Kuhl '121 into the frame (figure 2) of Chase '389 being enable to mapping quality of service levels between MPLS and ATM connection in a network element (Kuhl '121, col. 1, lines 25-30).

Regarding to claim 2, Chase et al. discloses determining that the inner tag identifies a service (figure 5, ATM, Frame relay, IMA) provisioned for the customer comprises

determining if the inner tag (figure 2, customer descriptor 22') has reserved value (figure 2, VLAN priority and VLAN tagid, customer descriptor 22') (col. 3, lines 56-62).

Regarding to claim 3, Chase et al. discloses wherein the external network is an ATM network (figure 5, ATM, Frame relay, IMA).

Regarding to claim 4, Chase et al. discloses wherein the inner tag value identifies a service (figure 5, ATM, Frame relay, IMA) provisioned for the customer and virtual circuit associated with an ATM network (col. 5, lines 20-25, lines 35-38).

Regarding to claim 5, Chase et al. discloses wherein the one or more identifiers are used to specify the virtual circuit (col. 5, lines 20-25, lines 35-38).

Regarding to claim 6, Chase et al. discloses wherein the external network is an IP network (see abstract, An Ethernet Metropolitan Area Network (10) provides connectivity to one or more customer premises (16.sub.1,16.sub.2,16.sub.3) to packet-based services, such as ATM, Frame Relay, or IP, while advantageously providing a mechanism for assuring security and regulation of customer traffic. Upon receipt of each customer-generated information frame (20), an ingress Multi-Service Platform (MSP) (12.sub.2) "tags" the frame with a customer descriptor (22') that specifically identifies the recipient customer. In practice, the MSP tags each frame by overwriting the Virtual Local Area Network (VLAN) identifier (22) with the customer descriptor. Using the

customer descriptor in each frame, a recipient Provider Edge Router (PER) (18) or ATM switch can map the information as appropriate to direct the information to the specific customer at its receiving site. In addition, the customer descriptor (22') may also include Quality of Service (QoS) information, allowing the recipient Provider Edge Router (PER) (18) or ATM switch to afford the appropriate QoS level accordingly. Each Ethernet switch may advantageously overwrite the VLAN identifier at an incoming port with a second tag associated with an egress port to increase the scale associated with single switch).

Regarding to claim 7, Chase et al. discloses the inner tag value identifies a provisioned IP network service (abstract, An Ethernet Metropolitan Area Network (10) provides connectivity to one or more customer premises (16.sub.1,16.sub.2,16.sub.3) to packet-based services, such as ATM, Frame Relay, or IP, while advantageously providing a mechanism for assuring security and regulation of customer traffic. Upon receipt of each customer-generated information frame (20), an ingress Multi-Service Platform (MSP) (12.sub.2) "tags" the frame with a customer descriptor (22') that specifically identifies the recipient customer. In practice, the MSP tags each frame by overwriting the Virtual Local Area Network (VLAN) identifier (22) with the customer descriptor. Using the customer descriptor in each frame, a recipient Provider Edge Router (PER) (18) or ATM switch can map the information as appropriate to direct the information to the specific customer at its receiving site. In addition, the customer descriptor (22') may also include Quality of Service (QoS) information, allowing the recipient Provider Edge Router (PER)

(18) or ATM switch to afford the appropriate QoS level accordingly. Each Ethernet switch may advantageously overwrite the VLAN identifier at an incoming port with a second tag associated with an egress port to increase the scale associated with single switch).

Regarding to claim 8, Chase et al. disclose the limitations of claim 1 above.

However, Chase et al. are silent to disclosing wherein the outer tag and the inner tag are replaced with one or more identifiers for tunneling to an IP network

Kuhl '121 disclose wherein the outer tag and the inner tag are replaced with one or more identifiers (figure 2, figure 3, col. 5, lines 15-20)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply replacing the outer tag (figure 3, outer label 318 of MPLS frame 312) and the inner tag (figure 3, inner label 320 of MPLS frame 312) with one identifier (figure 3, internal header 352 of internal cell 350 contains a connection identifier field 358 for the internal cell 350) for transmission onto the external network taught by Kuhl '121 into the outer tag and inner tag of figure 2 of Chase '389.

The replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network can be implemented into the figure 2 of Chase '389. The motivation for replacing the outer tag and the inner tag with one or more identifiers for transmission onto the external network as taught by Kuhl '121 into the frame (figure 2) of Chase '389 being enable to mapping quality of service levels

between MPLS and ATM connection in a network element (Kuhl '121, col. 1, lines 25-30).

Regarding to claim 12, claim 12 is rejected the same reasons of claim 2 above.

Regarding to claim 13, claim 13 is rejected the same reasons of claim 3 above.

Regarding to claim 14, claim 14 is rejected the same reasons of claim 4 above.

Regarding to claim 15, claim 15 is rejected the same reasons of claim 5 above.

Regarding to claim 16, claim 16 is rejected the same reasons of claim 6 above.

Regarding to claim 17, claim 17 is rejected the same reasons of claim 7 above.

Regarding to claim 18, claim 18 is rejected the same reasons of claim 8 above.

Regarding to claim 22, claim 22 is rejected the same reasons of claim 2 above.

Regarding to claim 24, claim 24 is rejected the same reasons of claim 2 above.

5. Claims 9, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Chase '389 – Kuhl '121) in view of Havala (Pub. No.: US 2005/0053079 A1)

Regarding to claim 9, the combined system (Chase '389 – Kuhl '121) disclose the limitations of claim 1 above.

However, the combined system (Chase '389 – Kuhl '121) are silent to disclosing wherein the metro Ethernet network is multiport layer 2 virtual private network.

Havala '079 disclose wherein the metro Ethernet network is multiport layer 2 virtual private network ([0040] [0042]).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply wherein the metro Ethernet network is multiport layer 2 virtual private network taught by Havala '079 into the communication system of the combined system (Chase '389 – Kuhl '121) in order to identify a connection (Havala '079 , page 1 [0004]). Therefore, the combined system would have been enable to mapping the virtual local area network to Multi Protocol Label Switching (MPLS) (Havala, page 1 [0008]).

Regarding to claim 19, claim 19 is rejected the same reasons of claim 9 above.

6. Claims 10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Chase '389 – Kuhl '121) in view of Lee (2004/0165600).

Regarding to claim 10, the combined system (Chase '389 – Kuhl '121) disclose the limitations of claim 1 above.

However, the combined system (Chase '389 – Kuhl '121) are silent to disclosing the inner tag and outer tags are QinQ tags.

Lee (2004/0165600) discloses the inner tag and outer tags are QinQ tags ([0039], QinQ, [0015], ATM, MPLS, Frame relay).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the inner tag and outer tags are QinQ tags taught by Lee into the combined system (Chase '389 – Kuhl '121) . One would have been motivated to do so to reduce in the needed skill level of operations management personal because the learning bridge function can now safely be performed at Customer Located Equipment (CLEs) and controlled by the customer only (page 3, [0021].

Regarding to claim 20, claim 20 is rejected the same reasons of claim 10 above.

Response to Arguments

7. Applicant's arguments filed 03/16/09 have been fully considered but they are not persuasive.

In the page 5, lines 23-25, the applicant argues that Chase '389 does not teach or suggest "determining that the inner tag values identifies a service provisioned for the customer site".

The examiner respectfully disagrees with the application's argument.

See figure 2, Chase '389 teaches or suggest determining that the inner tag (figure 2, VLAN priority and VLAN TAGID) values identifies a service (figure 2, User Priority 3 bits) in provisioned for the customer site.

For the reasons above, the examiner respectfully believes the 103 rejection of claims 1, 11, 21, 23 should be sustained.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Umayabashi et al. (Pub. No.: US 2004/0047353 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571)272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EDAN ORGAD can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ch
03/25/09

/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419